

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A ferroelectric material in which variations in the refractive index are induced by irradiation with light at two different wavelengths, wherein the ferroelectric material is a lithium tantalate single crystal with the composition $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4966$ to 0.4995 ;

the ferroelectric material has not undergone a reduction treatment; and

the ferroelectric material is undoped.

Claim 2 (Original): The ferroelectric material according to claim 1, wherein the ferroelectric material is a lithium tantalate single crystal with the composition $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4974$ to 0.4989 .

Claim 3 (Original): The ferroelectric material according to claim 1, wherein the concentration of protons contained in the lithium tantalate single crystal is such that the infrared absorption coefficient in the [OH] stretching mode falls within a range of 0 cm^{-1} to 0.15 cm^{-1} (0 cm^{-1} and 0.15 cm^{-1} are included in the range).

Claim 4 (Currently Amended): A two-color holographic recording medium obtained using a ferroelectric material in which variations in the refractive index are induced by irradiation with light at two different wavelengths, wherein the ferroelectric material is a lithium tantalate single crystal with the composition $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4966$ to 0.4995 ;

the ferroelectric material has not undergone a reduction treatment; and

the ferroelectric material is undoped.

Claim 5 (Original): The two-color holographic recording medium according to claim 4, wherein the ferroelectric material is a lithium tantalate single crystal with the composition $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4974$ to 0.4989 .

Claim 6 (Original): The two-color holographic recording medium according to claim 4, wherein the concentration of protons contained in the lithium tantalate single crystal is such that the infrared absorption coefficient in the [OH] stretching mode falls within a range of 0 cm^{-1} to 0.15 cm^{-1} (0 cm^{-1} and 0.15 cm^{-1} are included in the range).

Claim 7 (Currently Amended): A wavelength selection filter obtained using a ferroelectric material in which variations in the refractive index are induced by irradiation with light at two different wavelengths, wherein the ferroelectric material is a lithium tantalate single crystal with the composition $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4966$ to 0.4995 ;

the ferroelectric material has not undergone a reduction treatment;

the ferroelectric material is undoped; and

the ferroelectric material has at least one refractive index grating.

Claim 8 (Original): The wavelength selection filter according to claim 7, wherein the ferroelectric material comprises two or more refractive index lattices; and

the two or more refractive index lattices have respectively different interstitial pitches.

Claim 9 (Original): The wavelength selection filter according to claim 7, wherein the ferroelectric material is a lithium tantalate single crystal with the composition $\text{Li}_2\text{O}/(\text{Li}_2\text{O} + \text{Ta}_2\text{O}_5) = 0.4974$ to 0.4989 .

Claim 10 (Original): The wavelength selection filter according to claim 7, wherein the concentration of protons contained in the lithium tantalate single crystal is such that the infrared absorption coefficient in the [OH] stretching mode falls within a range of 0 cm^{-1} to 0.15 cm^{-1} (0 cm^{-1} and 0.15 cm^{-1} are included in the range).